

IN THE CLAIMS

1. (currently amended) An information processing apparatus, comprising:

a separating unit operable to separate an input multiplexed stream into a first stream comprised of ~~first~~video stream information and a second stream comprised of stream information other than ~~said first~~the video stream information;

a decoding unit operable to decode the first stream and to determine an input bit rate of the first stream;

an analyzing unit operable to determine an input bit rate of the second stream;

a setting unit operable to set a total bit rate of an output multiplexed stream;

a controller operable to control coding conditions for reencoding ~~said the~~the decoded first stream, the coding conditions including an output bit rate of the first stream that is determined on the basis of ~~a current~~an output bit rate of ~~said the~~the second stream and ~~said the~~total bit rate of ~~said the~~the output multiplexed stream, said currentthe output bit rate of ~~said the~~the second stream being extracted from set to be identical to the said input multiplexed bit rate of the second stream;

a coding unit operable to reencode ~~said the~~the first stream under said the coding conditions; and

a multiplexing unit operable to multiplex ~~said the~~the reencoded first stream and said the second stream to produce ~~said the~~the output multiplexed stream.

2. (currently amended) An information processing apparatus as claimed in claim 1, wherein said controller is operable to control ~~said the~~the coding conditions by determining a bit rate difference between ~~said the~~the total bit rate of ~~said the~~the output multiplexed stream and ~~said current~~the output bit rate of ~~said the~~the second stream, said the bit rate difference ~~being set as~~defining a maximum output bit rate of ~~said the~~the reencoded first

stream.

3. (currently amended) An information processing apparatus as claimed in claim 21, wherein ~~said the~~ coding conditions include ~~at least one of said bit rate difference and~~ a video frame size.

4. (cancelled)

5. (currently amended) An information processing apparatus as claimed in claim 1, wherein said controller is operable to control ~~said the~~ coding conditions so as to reencode ~~said the~~ first stream at a fixed output bit rate.

6. (currently amended) An information processing apparatus as claimed in claim 1, wherein said controller is operable to control ~~said the~~ coding conditions so as to reencode ~~said the~~ first stream at a variable output bit rate.

7. (currently amended) A method for reencoding an input multiplexed stream to provide an output multiplexed stream, said method comprising:

separating ~~said the~~ input multiplexed stream into a first stream comprised of first video stream information and a second stream comprised of stream information other than ~~said first the~~ video stream information;

determining an input bit rate of the first stream;

decoding the first stream;

determining an input bit rate of the second stream;

setting a total bit rate of ~~said the~~ output multiplexed stream;

controlling coding conditions for reencoding ~~said the~~ decoded first stream, the coding conditions including an output bit rate of the first stream that is determined on the basis of a current an output bit rate of said the second stream and said the total bit rate of said the output multiplexed stream, said current the output bit rate of said the second stream being being extracted from said set to be identical to the input

~~multiplexed~~ bit rate of the second stream;

reencoding ~~said the~~ first stream under ~~said the~~ coding conditions; and

multiplexing ~~said the~~ reencoded first stream and ~~said the~~ second stream to produce ~~said the~~ output multiplexed stream.

8. (currently amended) A method as claimed in claim 7, wherein said controlling step controls ~~said the~~ coding conditions by determining a bit rate difference between ~~said the~~ total bit rate of ~~said the~~ output multiplexed stream and ~~said the~~ ~~current~~ the input bit rate of ~~said the~~ second stream, ~~said the~~ bit rate difference ~~being set as~~ defining a maximum output bit rate of ~~said the~~ reencoded first stream.

9. (currently amended) A method as claimed in claim ~~8~~7, wherein ~~said the~~ coding conditions include ~~at least one of said bit rate difference and a~~ video frame size.

10. (cancelled)

11. (currently amended) A method as claimed in claim 7, wherein said controlling step controls ~~said the~~ coding conditions so as to reencode ~~said the~~ first stream at a fixed output bit rate.

12. (currently amended) A method as claimed in claim 7, wherein said controlling step controls the ~~said~~ coding conditions so as to reencode ~~said the~~ first stream at a variable output bit rate.

13. (currently amended) A recording medium recorded with a computer readable program for carrying out a method of reencoding an input multiplexed stream to provide an output multiplexed stream, ~~said computer readable program~~ method comprising:

separating ~~said the~~ input multiplexed stream into a first stream comprised of ~~first video~~ stream information and a second stream comprised of stream information other than ~~said first~~ the video stream information;

determining an input bit rate of the first stream;
decoding the first stream;
determining an input bit rate of the second stream;
setting a total bit rate of ~~said—the~~ output multiplexed stream;

controlling coding conditions for reencoding ~~said—the~~ decoded first stream, the coding conditions including an output bit rate of the first stream that is determined on the basis of ~~a current~~an output bit rate of ~~said—the~~ second stream and ~~said the total~~ bit rate of ~~said—the~~ output multiplexed stream, ~~said current~~ the output bit rate of ~~said—the~~ second stream being ~~extracted from said~~ set to be identical to the input multiplexed bit rate of the second stream;

reencoding ~~said—the~~ first stream under ~~said—the~~ coding conditions; and

multiplexing ~~said—the~~ reencoded first stream and ~~said the~~ second stream to produce ~~said—the~~ output multiplexed stream.

14. (currently amended) A recording medium as claimed in claim 13, wherein ~~said controlling step of said program~~ controls ~~said—the~~ coding conditions by determining a bit rate difference between ~~said—the~~ total bit rate of ~~said—the~~ output multiplexed stream and ~~said current~~the output bit rate of ~~said the~~ second stream, ~~said—the~~ bit rate difference being ~~set as~~defining a maximum output bit rate of ~~said—the~~ reencoded first stream.

15. (currently amended) A recording medium as claimed in claim ~~14~~13, wherein ~~said—the~~ coding conditions include ~~at least one of said bit rate difference and a~~ video frame size.

16. (cancelled)

17. (currently amended) A recording medium as claimed in claim 13, wherein ~~said controlling step of said program~~ controls ~~said—the~~ coding conditions so as to reencode ~~said—the~~ first stream at a fixed output bit rate.

18. (currently amended) A recording medium as claimed in claim 13, wherein said controlling step ~~of said program~~ controls ~~said the~~ coding conditions so as to reencode ~~said the~~ first stream at a variable output bit rate.

19. (currently amended) An information processing apparatus as claimed in claim 1, wherein ~~said first stream information includes video stream information and said the~~ second stream ~~information includes~~ information selected from the group consisting of audio information, still image information, character information, pattern information, and multimedia encoding information.

20. (cancelled)

21. (currently amended) An information processing apparatus as claimed in claim 1, wherein said setting unit is operable to set ~~said the total~~ bit rate of ~~said the~~ output multiplexed stream at a variable bit rate.

22. (currently amended) A method as claimed in claim 7, wherein ~~said first stream information includes video stream information and said the~~ second stream ~~information includes~~ information selected from the group consisting of audio information, still image information, character information, pattern information, and multimedia encoding information.

23. (cancelled)

24. (currently amended) A method as claimed in claim 7, wherein said setting step sets ~~said the total~~ bit rate of ~~said the~~ output multiplexed stream at a variable bit rate.

25. (currently amended) A recording medium as claimed in claim 13, wherein ~~said first stream information includes video stream information and said the~~ second stream ~~information includes~~ information selected from the group consisting of audio information, still image information, character information, pattern information, and multimedia encoding information.

26. (cancelled)

27. (currently amended) A recording medium as claimed in claim 13, wherein said setting step ~~of said program sets~~ the total ~~said~~ bit rate of the ~~said~~ output multiplexed stream at a variable bit rate.

28. - 30. (cancelled)